# **List of Contents**

| Volume 23   | Number 1   | March 1988   |
|---|--|--------------|
| Editorial   |  | 1            |
| Articles  |  |              |
|   | timation of the production of cosmic-ray-induced nu  |              |
|   | REGORY W. KALLEMEYN AND JOHN T. WASSON: The Ning and petrology of an anomalous CV chondrite        |              |
| O. Eugster, Th. Michel, and S. ages and radiogenic ages of  | Niedermann: Guangnan (L6) and Ningqiang (CV3): of two unusual chondrites                           | Exposure 25  |
|   | AND J. C. BARTON: The Binningup H5 chondrite: A  |              |
|   | Kerridge: Carbonates and sulfates in CI chondrites: parent body                                    |              |
| Mireille Christophe Michel-Lév<br>microchondrule- and carbo | vy: A new component of the Mezö-Madaras breccia: on-bearing L-related carbonaceous chondrite       | A 45         |
|   | EL, G. Dreibus and H. Weber: Camel Donga: A eucri  |              |
|   | JEFFREY TAYLOR AND HORTON NEWSOM: Igneous historidence from the Norton County enstatite achondrite |              |
|   | V. BOYNTON: Partitioning of rare earth elements betwo  |              |
| DAVID WALKER AND CARL B. AGE                                | E: Ureilite compaction   | 81           |
| Note  |  |              |
|   | Wäsch: The infrared transmission spectrum of the Sa  |              |
|   | ites and Their Parent Planets" by Harry Y. McSween   | Jr 95        |
|   | raters" by Kathleen Mark   |              |
| Bevan M. French: "Coon Mou                                  | Intain Controversies. Meteor Impact and the Develop<br>m Graves Hoyt                               | pment of the |
|   | Meteorites" by Richard R. Willey   |              |
| Meteoritical Society Busines                                | s  |              |
| •   | Carleton Moore   | 97           |
| Information for Contributor                                 | rs   | 99           |

#### Articles

- ROGER H. Hewins: Petrology and pairing of mesosiderites from Victoria Land, Antarctica . . . . . 123

### Critical Comments/Replies

#### Note

## Volume 23 Number 3 September 1988

#### Articles

| Leo J. Hickey, Kirk R. Johnson and Mary R. Dawson: The stratigraphy, sedimentology, and fossils of the Haughton Formation: A post-impact crater-fill, Devon Island, N.W.T., Canada | 221  |
|--|------|
| Elmar K. Jessberger: 40Ar-39Ar dating of the Haughton impact structure   | 233  |
| JEAN POHL, ALFONS ECKSTALLER AND P. BLYTH ROBERTSON: Gravity and magnetic investigations in the Haughton impact structure, Devon Island, Canada                                    | 235  |
| D. Scott and Z. Hajnal: Seismic signature of the Haughton structure  | 239  |
| RICHARD A. F. GRIEVE: The Haughton impact structure: Summary and synthesis of the results of the HISS project  | 249  |
| Abstracts of the 51st Meeting of the Meteoritical Society  | 255  |
| Meteoritical Society Business  |      |
| H. Y. McSween, Jr.: Leonard Medal citation for Klaus Keil  | 316  |
| ROBERT S. DIETZ: Barringer Medal citation for Michael R. Dence   | 317  |
| H. Y. McSween, Jr.: Nominations for the Leonard Medal; Reports on the activities of the Meteoritical Society, 1987–1988  | 318  |
| Book Review  |      |
| JOHN T. WASSON: "Thunderstones. A Study of Meteorites Based on Falls and Finds in Arkansas" by Derek W. G. Sears; "Brazilian Stone Meteorites" by Celso B. Gomes and Klaus Keil    | 319  |
| Volume 23 Number 4 December  | 1988 |
| Articles   |      |
| A. L. Graham, M. Christophe Michel-Lévy, J. Danon and A. J. Easton: The Tuxtuac, Mexico, meteorite, an LL5 chondrite fall  | 321  |
| C. Koeberl, F. Brandstätter, G. Niedermayr and G. Kurat: Moldavites from Austria   | 325  |
| ALAN E. Rubin: Formation of ureilites by impact-melting of carbonaceous chondritic material  | 333  |
| I. P. Wright, R. H. Carr and C. T. Pillinger: Carbon stable isotope analysers of individual deep-sea spherules   | 339  |
| A. W. R. Bevan and M. M. Grady: Mount Morris (Wisconsin): A fragment of the IAB iron Pine  |      |
| River?   | 349  |
| D. HEYMANN AND T. A. CELLUCCI: Raman spectra of shocked minerals 1: Olivine  | 353  |
| G. R. Byerly, E. Jarosewich, B. Mason and R. S. Clarke, Jr.: The Greenwell Springs LL4 chondrite: A new fall from Louisiana, USA   | 359  |
| Arthur J. Ehlmann and Klaus Keil: Classification of six ordinary chondrites from Texas   | 361  |
| JOHN T. WASSON, XINWEI OUYANG AND DAODE WANG: Compositional study of a suite of samples from the 28-t Armanty (Xinjiang) iron meteorite  | 365  |
| K. Çolakoğlu and M. Ceylan: An iron meteorite from Akyumak   | 371  |

| Thomas Stephan and Elmar K. Jessberger: 40Ar.39Ar ages of types 3 and 4, L and H chondrites from Antarctica          | 373 |
|--|-----|
| Notes  |     |
| J. Matthes and K. Adam: The Linum chondrite  | 378 |
| Edward J. Olsen, Glenn I. Huss and Eugene Jarosewich: The Eagle, Nebraska enstatite chondrite (EL6)                  | 379 |
| T. J. McCoy and Klaus Keil: Ingella Station, a new chondrite find from the Tenham strewnfield, Queensland, Australia | 381 |
| Hiram S. Jackson and Arthur J. Ehlmann: The Kirbyville eucrite   | 382 |
| Abstracts from Meteoritika   | 38  |
| Errata   | 38  |
| Memorial   |     |
| KLAUS KEN AND W. A. CASSIDY, Memorial for Lincoln Labor  | 20  |

